

ABSTRACT OF THE DISCLOSURE

The present invention features a method whereby the vacuum nozzle of each extendable vacuum spindle in a multi-head component placement machine may be calibrated during component pick/place cycles. Calibration of each vacuum nozzle ensures accurate location of the vacuum nozzle over a component at a component pick station. This is particularly important with extremely small components where a slight misalignment of a vacuum nozzle with a component to be picked could result in a missed pick. Because of the vacuum nozzle inspection and calibration on the fly during the placement cycle, there is no slowdown of the placement machine cycle rate.